BEFORE THE TENNESSEE REGULATORY AUTHORITY AT

NASHVILLE, TENNESSEE
February 23,2001

IN RE:	)	
	)	
PETITION OF BELLSOUTH TELECOMMUNICATIONS, INC.	)	**DOCKET NO.**
TO CONVENE A CONTESTED CASE TO ESTABLISH	)	**97-01262**
"PERMANENT PRICES" FOR INTERCONNECTION	)	
AND UNBUNDLED NETWORK ELEMENTS	)	

FINAL ORDER

This matter came before the Tennessee Regulatory Authority ("Authority" or "TRA") at a regularly scheduled Authority Conference held on December 19, 2000, for final determination of the remaining issues in Phase Two of this docket, which are as follows: vertical features, new technology, collocation, expenses, work group activities, and fall-out rates used in the cost studies for certain unbundled network element combinations. This Order reflects the findings and rulings of the Authority at the December 19, 2000 Authority Conference and incorporates by reference the Authority's *Interim Order on Phase I of Proceeding to Establish Prices for Interconnection and Unbundled Network Elements* ("*First Interim Order*") issued on January 25, 1999; *Order Re: Petitions for Reconsideration and Clarification of Interim Order on Phase I* ("*Order on Reconsideration*") issued November 3, 1999; *Second Interim Order Re: Revised Cost Studies* ("*Second Interim Order*") issued on November 22, 2000; and *Third Interim Order Re: BellSouth's Revised Cost Studies* ("*Third Interim Order*") issued on January 4, 2001.

TRAVEL OF THE CASE

The purpose of this docket is to establish cost-based prices for interconnection and

unbundled network elements ("UNEs"). The Authority opened this docket as a contested case on July 15, 1997 upon the filing of a petition by BellSouth Telecommunications, Inc. ("BellSouth") on June 23, 1997. BellSouth filed its petition as a result of the Authority adopting proxy prices for interconnection and UNEs in the arbitration proceedings between BellSouth and AT&T Communications of the South Central States, Inc. (TRA Docket No. 96-01152) and BellSouth and MCI Telecommunications Corporation (TRA Docket No. 96-01271). The parties to the arbitration proceedings were to use these proxy prices in the interim period prior to approval of cost-based interconnection and UNE prices.

The following entities have participated in this proceeding as Intervenors: AT&T Communications of the South Central States, Inc. ("AT&T"); Office of the Attorney General, Consumer Advocate Division; GTE Long Distance; MCI Telecommunications Corp.;[1] NEXTLINK Tennessee; Time Warner Communications of the Mid-South; United Telephone-Southeast; Sprint Communications Company, L.P.; WorldCom, Inc.;[1] LCI International Telecom Corp.; the Tennessee Municipal Telecommunications Group; Tennessee Cable Telecommunications Association ("TCTA"); American Communications Systems, Inc.; and Brooks Fiber Communications of Tennessee, Inc. The Authority also granted Intermedia Communications, Inc. limited participation in this proceeding pursuant to its petition.

This proceeding has been divided into two phases. In Phase I, the Authority determined the adjustments for each cost model presented. The Authority conducted hearings on the issues in Phase I on November 17-21 and 24, 1997 and February 23 and 25-27, 1998. The Directors of the Authority deliberated on the Phase I issues at a regularly scheduled Authority Conference held on June 30, 1998. The Authority issued its *First Interim Order* on January 25, 1999. In

[1] MCI Telecommunications, Corp. merged with WorldCom, Inc. in September of 1998 and subsequently appeared in this action as "MCI WorldCom."

Phase II, the Authority is determining the prices for interconnection and UNEs based on the cost studies filed in compliance with the Authority's *First Interim Order*. The final prices are based on criteria specified by the Federal Telecommunications Act of 1996 ("the Act") and orders issued by the Federal Communications Commission ("FCC"), including FCC Order No. 96-325.[2]

Two models purporting to reflect Total Element Long Run Incremental Cost ("TELRIC") have been presented in this proceeding for calculating UNE prices: BellSouth's "TELRIC Calculator" model and the HAI ("Hatfield") model presented jointly by AT&T and MCI WorldCom. Although the specific methodologies and inputs differ, both models calculate the total investment required to provide the UNE and associated expenses related to that investment. The UNE investment includes the capitalized costs of the network facilities (e.g., cable, wire, poles, switches) plus materials and labor costs to install the facilities. Indirect investments such as allocation of land and building costs are added to the direct investment discussed above. Model inputs concerning fill factors, structure sharing, and available technologies drive the investment costs. Expenses, calculated as a percentage of the investment, are then applied to the investment amounts to arrive at the final estimates of UNE costs. Expenses include depreciation, maintenance expenses, administrative expenses, and a fair return on the investment. The Authority's decisions have adjusted both the investment and expense inputs.

The Authority's *First Interim Order* directed the parties to submit cost studies in compliance therewith. After issuance of the Authority's *First Interim Order*, on February 4, 1999, BellSouth and MCI WorldCom filed petitions requesting the Authority to reconsider and clarify specific issues. The parties filed the required cost studies on February 24, 1999. The

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[2] *In re Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, FCC 96-325, CC Docket No. 95-185, 11 FCC Rcd. 15, 499 (Aug. 8, 1996) (First Report and Order) (hereinafter "*Local Competition Order*")

Authority deliberated on BellSouth's and MCI WorldCom's petitions at an Authority Conference on April 20, 1999 and modified some of its earlier decisions, as reflected in the *Order on Reconsideration*.

As a part of Phase Two and pursuant to the Authority's *First Interim Order* and *Order on Reconsideration*, BellSouth filed its revised TELRIC Calculator Model, and AT&T and MCI WorldCom filed their revised HAI Model 4.0 on December 1, 1999. On December 13, 1999, the Authority requested comments from the parties on the proposed revised cost studies reflecting the adjustments required by the *First Interim Order* and the *Order on Reconsideration*. On January 20, 2000, BellSouth, AT&T, MCI WorldCom, and TCTA filed their initial comments to the revised cost studies. The parties filed additional comments thereafter. According to certain comments filed by AT&T and MCI WorldCom, BellSouth did not comply with the orders of the TRA concerning four issues in this proceeding: (1) the deployment of Integrated Digital Loop Carrier ("IDLC") technology; (2) drop wire lengths; (3) Operational Support Systems ("OSS") recovery; and (4) vertical features. At a regularly scheduled Authority Conference held on April 25, 2000, the Authority deliberated on and issued its findings regarding the revised cost studies. Those findings are reflected in the Authority's *Second Interim Order*.

BellSouth filed its adjusted cost study on June 9, 2000. AT&T and TCTA filed comments regarding the cost study on June 26, 2000. In *AT&T's Comments on Revised BellSouth Cost Studies* ("*AT&T's First Comments*"), AT&T asserted that BellSouth's adjusted cost study failed to comply with the Authority's orders and directives concerning the following issues: (1) vertical features; (2) the requirement to incorporate into Tennessee cost studies any benefits of advances in technology reflected in cost studies filed by BellSouth in other states; (3) deaveraging methodology; and (4) the Authority's adoption of the AT&T/MCI WorldCom

collocation model. TCTA complained that it was difficult to determine whether BellSouth had accurately followed the Authority's directives because BellSouth's adjusted cost study had failed to reflect its own use of OSS Systems and BellSouth had failed to provide adequate documentation to support its inclusion of the cost for vertical features in the recurring rates for unbundled ports.

At the Authority Conference held on August 29, 2000, the Authority considered BellSouth's adjusted cost study and ordered BellSouth to "submit detailed studies showing all the adjustments that it made to comply with our April 25th ruling as it relates to vertical features."[3] The Directors concluded that BellSouth failed to include in its June 2000 revised cost studies filed in Tennessee those technological advances available to it and reflected in BellSouth's cost studies filed in Georgia.[4] The Authority ordered BellSouth to include new technology in its Tennessee cost study stating, "there were no reasons articulated for the lack of compliance with the April 25th directive in that regard."[5] The Authority clarified that its adoption of BellSouth's cost model for UNE rates did not alter or modify its earlier decision to adopt the AT&T/MCI WorldCom collocation cost model.[6] The action taken by the Authority at the August 29, 2000 Conference is reflected in the *Third Interim Order.*

REMAINING ISSUES IN PHASE TWO

On October 2, 2000, BellSouth filed a response ("*BellSouth's Response to the Authority*") to the instructions of the Authority that were provided at the August 29, 2000 Authority

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[3] Transcript of Authority Conference, Aug. 29, 2000, p. 8, lines 14-16. On April 25, 2000, at the regularly scheduled Authority Conference, the TRA adopted BellSouth's TELRIC Calculator Model for use in deriving permanent prices for UNEs in this proceeding and ordered BellSouth to make adjustments to the drop wire lengths, OSS costs, vertical features, technology advances, UNE combinations, and deaverage UNE prices using BellSouth's proposed methodology.

[4] *Third Interim Order,* Jan. 4, 2001, p. 6.

[5] Transcript of Authority Conference, Aug. 29, 2000, p. 8, lines 22-25, p. 9, line 1.

[6] *Third Interim Order,* Jan. 4, 2001, p. 7.

Conference. In its October 2, 2000 filing, BellSouth raised questions concerning vertical features, new technology, collocation, and expenses in its TELRIC Calculator Model.

AT&T filed its additional comments to BellSouth's June 1, 2000 cost studies on October 2, 2000 (*"AT&T's Second Comments"*). In its comments on BellSouth's loop-transport combination studies, AT&T maintained "that the recurring rates proposed by BellSouth conform to earlier decisions by the Authority in this proceeding."[7] Therefore, AT&T's concern as to this issue addresses only the non-recurring rates proposed by BellSouth for loop-transport combinations. AT&T also claimed that BellSouth uses "unnecessary workgroups and costs" and that BellSouth's 100% manual work assumption is inappropriate in a forward-looking cost study.[8] On October 17, 2000, BellSouth filed its response to AT&T's comments.

Vertical Features

BellSouth maintains that it has implemented the specific adjustments ordered by the Authority in developing the cost of vertical features.[9] BellSouth claims that, as directed by the Authority, it implemented a procedure involving four adjustments in order to calculate the cost of vertical features.[10] According to BellSouth, the four adjustments "result in the development of the cost of switch ports by allocating an amount of processor investment."[11] BellSouth contends that "there are more costs associated with vertical features than simply processor usage" such as "specialized hardware and right-to-use-fees, the cost of which the Authority held should be

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[7] *AT&T's Second Comments*, Oct. 2, 2000, p. 1.
[8] *Id.* at 2-3.
[9] *See BellSouth's Response to the Authority*, Oct. 2, 2000, p. 1.
[10] *See id.* at 2. BellSouth used the following procedure to calculate the cost of vertical features: (1) using the marginal mode of the Switching Cost Information System model ("SCIS") with no getting started or processor investment; (2) recalculating switch usage so that non-traffic sensitive investments are allocated to the switch ports; (3) adjusting the switch vendor discounts; (4) assuming the deployment of 70.38% Integrated Digital Loop Carrier and 29.62% analog terminations. *Id.*
[11] *Id.*

included in the cost 'for a switch port that includes all features.'"[12]

AT&T argues that "it is inappropriate to include additional costs for vertical features in the price of switching since features are not usage sensitive; nearly all costs associated with features are included in the initial cost of purchasing a switch and are thus already reflected in the cost of the port."[13] AT&T requests that the Authority reject BellSouth's proposed UNE port prices and adopt the basic port recurring prices which exclude the added feature costs.[14]

According to the FCC, the local switching capability network element is defined as "all features, functions, and capabilities of the switch, which include, . . . but not limited to custom calling, custom local area signaling service features, and Centrex, as well as any technically feasible customized routing functions provided by the switch."[15] The Authority correctly interpreted this rule and ordered that the cost of a switch port should include all features. Thus, when a competing local exchange carrier ("CLEC") purchases the local switching element at cost-based rates as determined by the Authority, it is expecting to receive a switch port with all features included at one cost, rather than two separate costs as proposed by BellSouth.

In the *First Interim Order,* the Authority found that "none of the parties argued that a price for a switching port with all vertical features should not be established. Hence, the forward-looking cost of a switching port with all vertical features should be calculated."[16] The Authority also determined that "the price of the switched port shall include all features."[17] The Authority further ordered:

> [BellSouth] shall amend its switched cost studies in the following manner: (1) use the output from the marginal mode SCIS/MO, (2) recalculate switched usage

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[12] *Id. (quoting Order on Reconsideration,* Nov. 3, 1999, p. 44).
[13] *AT&T's First Comments*, June 26, 2000, p. 2.
[14] *AT&T's First Comments,* June 26, 2000, p. 4.
[15] 47 C.F.R. § 51.319 (c)(1)(iii).; *see also Local Competition Order,* ¶ 413.
[16] *First Interim Order,* Jan. 25, 1999, p. 24.
[17] *Id.* at 39.

> charges per minute of use using the following formula: Total switched investments, less nontraffic sensitive line termination and getting started investments, divided by minutes equivalent of busy hours CCS; (3) change vendor discounts used as inputs in the [BellSouth] switched cost studies to the percentages given on line 6, page 19 of Ms. Petzinger's pre-filed rebuttal testimony; and (4) assume 70.38% IDLC and 29.62% analog line terminations in calculating switching port costs. Additionally, the price of the switched port shall include all features with no additional charges, specifically no "glue" charges.[18]

In its *Order on Reconsideration*, the Authority clarified that "BellSouth should include feature-specific costs (e.g., the costs of specialized hardware, right-to-use fees, and the costs of administrative provisioning time associated with vertical features) in its TELRIC estimates for a switch port that includes all features and BellSouth shall not recover non-traffic sensitive feature-specific costs through per minute usage charges."[19]

Finally, in its *Second Interim Order*, consistent with its previous decisions concerning vertical features, the Authority stated:

> [u]nder the Authority's Orders, the cost of the vertical features must be built into the costs of the unbundled switch port element. Permitting BellSouth to include separate charges for vertical features may allow a double-recovery of its costs for vertical features. BellSouth should adjust its cost studies by removing the separate charges for vertical features, such that a switch port includes all features.[20]

Therefore, according to the FCC and the Authority, when a CLEC orders a switch port at a cost-based rate, it is entitled to receive the vertical features of the switch as part of that cost.

It is obvious from a review of the Authority's *First Interim Order, Order on Reconsideration,* and *Second Interim Order* that the Authority has established consistent and unambiguous directives on this matter. BellSouth has repeatedly failed to comply with these directives.

After reviewing the record, the Authority finds that on December 1, 1999, in

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[18] *First Interim Order,* Jan. 25, 1999, pp. 39-40.
[19] *Order on Reconsideration*, Nov. 3, 1999, p. 44.
[20] *Second Interim Order*, Nov. 22, 2000, p. 9.

contravention to its orders, BellSouth included separate charges for vertical features in addition to the recurring charge for the switch port. Further, during a regularly scheduled Authority Conference on April 25, 2000, the Authority ordered BellSouth to remove the separate charges for vertical features from its cost studies. On June 9, 2000, BellSouth filed "compliant" cost studies in response to the Authority's directives. Nevertheless, instead of adjusting the cost of unbundled local exchange ports and including vertical features such that the cost of a switch port include all features, BellSouth "summed the applicable features and added this sum to the appropriate port."[21] This clearly violates the Authority's repeated directives that vertical feature costs be built into the costs of the switch port to avoid double-counting any costs associated with these features and/or the switch itself.

The Authority concludes that BellSouth has continually failed to comply with the Authority's orders on this issue and has failed to demonstrate that BellSouth's proposed vertical feature costs are reasonable. Thus, consistent with its previous orders, the Authority determines that rates for all vertical features proposed by BellSouth be set at $0.00. Consequently, the basic switch port UNE shall include all vertical features at the rates for switch ports proposed in BellSouth's December 1, 1999 cost studies.

New Technology

BellSouth claims that "incorporating 'new technology' into [its] studies cannot reasonably be implemented without starting the cost modeling process completely anew."[22] BellSouth states that the Authority rejected AT&T's argument that BellSouth should assume that all DLC loops are served by IDLC using GR303 instead of TR008 technology. BellSouth

[21] *BellSouth's Responses to the Authority's Data Request*, Aug. 1, 2000, Item No. 3, p. 2 (filed as proprietary); *see also BellSouth's Cost Studies*, June 9, 2000, p. vi.
[22] *BellSouth's Response to the Authority*, Oct. 2, 2000, p. 5.

maintains that the only "new technology" it presented in other states "is through its new BellSouth Telecommunications Loop Model© (or "BSTLM"), which has been filed in Florida and Louisiana and will soon be filed in Alabama and Kentucky."[23] BellSouth maintains that the BSTLM is the "next generation" loop model and encompasses the latest technology, including "the deployment of GR303 IDLC systems."[24] Finally, BellSouth also argues that the filing of a new cost model would require restarting the rate-making process.[25] BellSouth claims that it did not believe this was the TRA's intent at this late stage of this proceeding because the Authority is close to adopting "just and reasonable rates" as required by the Act.

In the *First Interim Order*, the Authority ordered that "prices should be established using the forward-looking economic cost methodology as defined by the FCC's TELRIC methodology."[26] The Authority later found that this directive, as restated in the Authority's *Second Interim Order,*

> places a fiduciary responsibility on all parties, CLEC and ILEC alike, to ensure that the methodology adopted is populated only with those costs that reflect the least cost and most efficient technology. To the extent that BellSouth presents new technology in other venues, it has, as articulated in the First Interim Order, a responsibility to include that technology in cost studies filed in Tennessee.[27]

The Authority finds that as telecommunications technology improves, the direct and indirect costs of maintaining the telephone network may continue to decline over time. At the same time, ILECs and CLECs should continue to adjust their operations in a manner consistent with advances in technology, leading to less and less manual-related costs and more automation-related costs. Over time, telecommunications network expenses should decrease. The Authority

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[23] *Id.* at 5.
[24] *Id.*
[25] *Id* at 6.
[26] *First Interim Order*, Jan. 25, 1999, p.8.
[27] *Second Interim Order*, Nov. 22, 2000, p. 10.

does not find support for BellSouth's assertion that new technology cannot be incorporated into its studies without beginning anew the cost modeling process. The Authority finds that BellSouth can adjust its inputs, work times, fallout, and split between electronic and manual processing without completely starting the modeling process anew. Nevertheless, because the Authority finds that the process of incorporating technology advances may be cumbersome and delay establishing permanent prices for unbundled network elements, the Authority determines to convene a new generic proceeding to consider technology advances and geographic deaveraging.

Collocation

BellSouth states that even though the Authority's August 29, 2000 decision upheld the use of the AT&T/MCI WorldCom Collocation Model, the Authority should take notice of the inadequacies in that model. Specifically, BellSouth asserts that "the AT&T/MCI WorldCom Collocation Model does not generate costs for all the work necessary to provide collocation and, in any event, cannot be reconciled with the recent decision of the United States Court of Appeals for the Eighth Circuit."[28] AT&T argues that the Authority has adopted the AT&T/MCI WorldCom collocation cost model and that the Authority's decision to adopt BellSouth's cost studies was not a decision to reconsider its earlier determination adopting the AT&T/MCI WorldCom collocation cost model.[29]

The Act requires ILECs

> to provide, on rates, terms, and conditions that are just, reasonable, and nondiscriminatory, for physical collocation of equipment necessary for interconnection or access to unbundled network elements at the premises of the local exchange carrier, except that the carrier may provide for virtual collocation if the local exchange carrier demonstrates to the State commission that physical

[28] *BellSouth's Response to the Authority*, Oct. 2, 2000, p. 7.
[29] *AT&T's First Comments*, June 26, 2000, p. 9.

collocation is not practical for technical reasons or because of space limitations.[30]

The FCC also has rules which are applicable to all collocation arrangements under Section 256(c)(6) of the Act and which "require incumbent LECs to make available to requesting competitive LECs additional forms of collocation known as shared and cageless collocation arrangements."[31]

In the Authority's *First Interim Order*, the Authority adopted the AT&T and MCI WorldCom collocation approach for calculating the rates for physical collocation.[32] Further, the Authority's decision on August 29, 2000, as reflected in the *Third Interim Order,* confirmed that the Authority's adoption of BellSouth's cost model for UNE rates did not modify its earlier decision to use the AT&T/MCI WorldCom model for collocation.[33] The AT&T/MCI WorldCom Collocation Model only addressed physical collocation. BellSouth's cost studies include rates for virtual collocation elements, but no rates are presented for cageless collocation elements. No party in this proceeding has challenged BellSouth's rates for virtual collocation. Therefore, based on the record before it, the Authority finds that the rates proposed by BellSouth for virtual collocation elements are acceptable. Because no parties have requested adjustments in this proceeding, the Authority will take no further action on the issue of collocation.

Expenses

BellSouth asserts that "double reductions" in expenses were imposed by the adjustments

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[30] 47 U.S.C. § 251(c)(6).

[31] *In re Deployment of Wireline Services Offering Advanced Telecommunications Capability,* CC Docket No. 98-147 and *Implementation of the Local Competition Provisions of the Telecommunications Act,* CC Docket No. 96-98, FCC 00-297, 15 FCC Rcd. 17,806, ¶ 12 (Aug. 10, 2000) (Order on Reconsideration and Second Further Notice of Proposed Rulemaking in CC Docket No. 98-147 and Fifth Further Notice of Proposed Rulemaking in CC Docket No. 96-98); *see also* 47 C.F.R. § 51.321-323.

[32] *First Interim Order*, Jan. 25, 1999, p. 41.

[33] Transcript of Authority Conference, Aug. 29, 2000, p. 9. The Authority believes that by this decision, the Directors confirmed their earlier order adopting AT&T and MCI WorldCom collocation model for calculating the rates for physical collocation.

that the TRA ordered to the TELRIC Calculator Model expense factors. BellSouth claims that (1) adjustments reducing BellSouth's total investment (i.e., modifying the fill factors, drop length, residence/business split, and pole loadings) produced the unintended consequences of reducing BellSouth's expenses; and (2) reductions of BellSouth's shared and common costs resulted in yet another reduction of its expenses. The end result is that "double reductions" in expenses inadvertently forces BellSouth to under-recover its expenses.[34] In addition, BellSouth claims that the Authority's modifications to BellSouth's investments have distorted the relationship between expenses and investment "such that the expenses generated by BellSouth's cost model cannot accurately reflect the expense BellSouth will incur on a going-forward basis."[35]

This issue was first presented to the Authority by BellSouth in its filing of the last portion of its compliant cost studies on June 9, 2000. Throughout this proceeding, BellSouth was given the opportunity to defend its position and inputs during the hearings, motions for clarification and/or reconsideration, data requests, etc. The issue of "double reductions" was never raised before. After carefully considering the positions of the parties, the Authority finds that no further adjustments are necessary based on the following analyses:

1. Fill/Utilization Factors

After reconsideration and based on ARMIS data for BellSouth, the Authority adopted the fill/utilization factors (i.e., 50.2% for distribution feeder, 65.1% for copper feeder, and 74.0% for fiber feeder) as proposed by BellSouth for use in its TELRIC Calculator Model.[36] BellSouth

[34] *BellSouth's Response to Authority,* Oct. 2, 2000, p. 10.
[35] *Id.* at 13.
[36] *Order on Reconsideration*, Nov. 3, 1999, p. 10.

presented no alternative fill and utilization factors; neither did the other parties in this proceeding.

2. Drop Lengths

BellSouth assumed in its initial cost studies that the drop wire material is based on a state-specific estimate of average distance of 300 foot buried and 250 foot aerial. The Authority rejected BellSouth's approach and adopted AT&T's proposed drop length of 100 feet based on the 73 foot national average calculated in a BellCore study.[37] The Authority was guided by the forward-looking and most-efficient and least-cost principle. The Authority finds that an increase in drop lengths would produce an unreasonably and unjustly higher cost of the loop and is unwarranted. BellSouth has provided no evidence to suggest otherwise.

3. Residence /Business Split

BellSouth initially proposed that the residence and business weighting of loops used in the TELRIC Calculator Model should be 79.99% for residence and 20.01% for business.[38] The Authority ordered first the use of 69.22% and 30.78% split as proposed by TCTA, but after reconsideration, the Authority ordered the 62.89% residence and 37.11% business split.[39] The Authority arrived at this conclusion based on the loop weightings reflected in the 1996 ARMIS data, which also included non-switched lines. Relying on BellSouth's Annual Reports from 1996 to 1999 and using the same methodology adopted by the Authority in the *Order on Reconsideration*,[40] the Authority finds that from 1996 to 1999 the percentage of residential lines in BellSouth's network declined on average, while BellSouth originally proposed a higher weight for residential lines. Any increase in the residential lines at this time would likely

[37] *First Interim Order,* Jan. 25, 1999, p. 19. The Bellcore study was a national study conducted in 1983-1985.
[38] *See* TELRIC Calculator Model 1.2 and BellSouth Default Values.
[39] *Order on Reconsideration*, Nov. 3, 1999, p. 11.
[40] *Id.* at p. 21-22.

increase TELRIC costs, is inconsistent with the goals of the Act, and is not warranted by any new evidence submitted by BellSouth.

4. Shared and Common Costs

In its *First Interim Order*, the Authority found that BellSouth's shared and common cost adjustments "are based on current market conditions and, despite the forward-looking adjustments, do not appear to be representative of a competitive marketplace. In addition, they are calculated separately from the BellSouth's TELRIC Calculator and are not easily verifiable."[41]

BellSouth claims that an increase in shared costs reduces the actual investment, which in turn reduces the expenses, because the ratio of expenses to investment is fixed to a certain level. BellSouth also argues that an increase in the number of parties sharing the same facilities actually increases maintenance costs. BellSouth, however, did not sufficiently explain with specificity how these effects are manifested in its cost model.

The Authority finds that the adjustments previously ordered are supported by a careful review of the entire record in this proceeding and should not be modified.

Workgroups Activities

In *AT&T's Second Comments*, AT&T acknowledges that BellSouth conformed to the Authority's decisions in this proceeding concerning recurring rates but maintains its concern with the non-recurring rates proposed by BellSouth for loop-transport combinations.[42] According to AT&T,

> [T]he non-recurring cost studies also should reflect forward-looking assumptions and competitive efficiencies, such as direct access to BellSouth's OSS and minimal or no manual activities. Moreover, BellSouth's non-recurring cost studies should not reflect the imposition of workgroups or activities upon CLECs

[41] *First Interim Order*, Jan. 25, 1999, p. 10.
[42] *AT&T's Second Comments*, Oct. 2, 2000, p. 1.

> that BellSouth does not use in its own retail operations. Activities associated with manual assistance due to errors in the network management systems and databases do not benefit customers and are unnecessary in a forward-looking environment."[43]

AT&T makes specific reference to Local Customer Service Center ("LCSC") and the UNE Center ("UNEC")/Access Customer Advocate Center ("ACAC") as workgroups.

AT&T adjusted BellSouth's non-recurring cost studies by: (1) eliminating all non-recurring costs that have no justification in a forward-looking network architecture and efficient provisioning process (LCSC and UNEC/ACAC) and (2) assuming 10% manual work on the orders for loop-transport combinations (fall-out rates for work centers) rather than 100% manual work.[44] AT&T requested that the Authority adopt AT&T's adjusted rates for loop transport combinations rather than the rates proposed by BellSouth.

BellSouth claims that it "identified the one-time work activities that are typically associated with installing or disconnecting combinations of the loop and interoffice transport unbundled network elements."[45] BellSouth "defined work functions, established work flows, and determined work times"[46] and using the methodology established in this proceeding, "developed directly assigned labor costs and accumulated work function costs to determine the total non-recurring costs for those elements."[47]

In addition, BellSouth contends it is justified in being compensated for these costs and that "AT&T ignores that BellSouth, acting as a wholesale provider of network elements, must also have work processes in place to ensure that CLECs, including AT&T, obtain services in a

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[43] *Id.* at 2.
[44] *Id.* at 2-3.
[45] *BellSouth's Response to AT&T's Comments*, Oct. 17, 2000, p. 1.
[46] *Id.* at 1.
[47] *Id.* at 1-2.

manner consistent with the Telecommunications Act of 1996."[48] BellSouth concludes that the Authority should reject AT&T's proposed rates, because AT&T made undefined adjustments to BellSouth's proposed work times and presented no credible basis for adjusting BellSouth's proposed non-recurring rates.

Notwithstanding BellSouth's assertion, the Authority finds that BellSouth's cost study presented in this proceeding contains hundreds of inputs, activities, and work times which are not supported by documented evidence. Although AT&T claims that the workgroups, the LCSC, and the UNEC/ACAC are unnecessary, the Authority finds that AT&T could have contested the use of these workgroups from the beginning of this proceeding and, like BellSouth, AT&T was given such opportunity throughout these proceedings. Nevertheless, AT&T did not raise this issue until October 2, 2000. In addition, an AT&T witness in the Florida Public Service Commission Docket No. 990649-TP proceeding has indicated that some of the work centers are in fact necessary. While the presence of many go-between work centers in a process likely to be wholly automated may become obsolete over time, the Authority finds that the removal of these workgroups from the cost studies at this time may be premature. The Authority reserves the right to inquire into this issue further, as warranted with the passage of time, either on its own motion or on the motion of another party.

Fall-Out Rates

In its *First Interim Order,* the Authority adopted a fallout rate of 7% for the TELRIC Calculator Model.[49] The Authority determined that this rate was within the range proposed by the parties. Indeed, BellSouth estimated a 20% fallout rate for CLEC orders from the Electronic Interface, based on actual experience with electronic ordering, and AT&T's Non Recurring Cost

[48] *Id.* at 4.
[49] *First Interim Order,* Jan. 25, 1999, p. 40.

Model assumed a fallout rate of 2% (or a 98% flow through). The reasoning of the Authority was that, over time, certain advances in OSS will replace manual work activities with automated activities, thereby reducing the level of fallout. Therefore, Local Customer Service Center, Work Management Center, and Access Customer Advocate Center should reflect a 7% fallout rate.

In addition, the Authority ordered BellSouth to modify its non-recurring cost model to reflect only 3 minutes of work activity per order at the LCSC when an order falls out.[50] Further, the Authority clarified that BellSouth should adjust its cost model to reflect 15 minutes of work time to resolve a fallout situation that will occur 7% of the time.

In an automated world using efficient and forward-looking OSS, most of the manual tasks are progressively replaced by mechanized tasks. The telecommunications network has seen and continues to see increased automation in network maintenance and telecommunication services. According to BellSouth, AT&T's recommendation to adjust BellSouth's fallout rate from 100% to 10% should not be accepted because the activities performed are 100% manual work and there is no alternative electronic order available. The Authority denies AT&T's request to change the manual work assumption from 100% to 10% and rejects AT&T's proposed non-recurring rates for unbundled loop combinations.

THE FILING OF TARIFFS

At the December 19, 2000 Authority Conference, the Directors unanimously adopted the above-stated findings and ordered BellSouth to file compliant tariffs. To ensure that cost based UNE rates are generally available to all CLECs on a nondiscriminatory basis as required by the

[50] *Id.* at 33. The three minutes per order was based on a calculation using the 20% fallout rate proposed by BellSouth multiplied by fifteen (15) minutes of work activity (20% x 15 minutes = 3 minutes of work time required). *See Order on Reconsideration*, p. 36.

Act, the Authority has ordered BellSouth to file tariffs containing the UNE rates approved in this docket as well as the terms and conditions applicable to each UNE.[51] At the December 19, 2000 Authority Conference, the Authority ordered BellSouth to file these tariffs within thirty (30) days of the filing of the transcript of the December 19, 2000 Conference. These tariffs shall reflect the rates included in BellSouth's cost study filed on December 1, 1999 and the rates for combinations filed on June 9, 2000. Further, these tariffs shall reflect the rates for physical collocation using the AT&T/MCI WorldCom collocation model as adopted by the Authority on January 25, 1999. Finally, these tariffs shall reflect the geographically deaveraged rates in three (3) zones as previously ordered by the Authority. BellSouth was ordered to follow the format set forth in **Exhibit A** , attached to this Order. The Authority provided copies of **Exhibit A** to the parties during the December 19, 2000 Authority Conference.

Such tariffs will provide a price list for all CLECs showing the cost-based UNE rates in Tennessee. These price lists however, do not preclude parties from negotiating UNE rates different from those in the tariffs. The tariffs simply provide parties with the opportunity to adopt UNE rates established in a contested case proceeding that are consistent with the pricing standards of the Act. In addition, TRA rules require utilities to file tariffs for "each class of service rendered" and that "[r]ules and regulations of the utility that in any manner affects the

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[51] 47 USC § 252(d)(1) states that:
(d) PRICING STANDARDS- (1) INTERCONNECTION AND NETWORK ELEMENT CHARGES- Determinations by a State commission of the just and reasonable rate for the interconnection of facilities and equipment for purposes of subsection (c)(2) of section 251, and the just and reasonable rate for network elements for purposes of subsection
(c)(3) of such section—
(A) shall be—
(i) based on the cost (determined without reference to a rate-of-return or other rate-based proceeding) of providing the interconnection or network element (whichever is applicable), and
(ii) nondiscriminatory, and
(B) may include a reasonable profit.

rates charged or to be charged or that define the extent or character of the service to be included with each tariff."[52]

IT IS THEREFORE ORDERED THAT:

1. Recurring and non-recurring rates for all vertical features proposed by BellSouth are set to $0.00 and are included in the switch port. The rates for a basic switch port, which include all vertical features, shall be the same rate proposed in BellSouth's December 1, 1999 cost studies.

2. The Authority will convene a new generic proceeding to consider technology advances and geographic deaveraging.

3. The rates proposed by BellSouth for virtual collocation elements are adopted. There will be no further action on this issue.

4. Removal of workgoups from the cost studies is unwarranted at this time, and the Authority reserves the right to investigate this issue further if necessary.

5. AT&T's requests to change the manual work assumption from one hundred percent (100%) to ten percent (10%) and the proposed non-recurring rates for unbundled loop combinations are denied.

6. BellSouth shall file, within thirty (30) days of the filing of the transcript of the December 19, 2000 Authority Conference, tariffs containing the UNE rates approved by the Authority in this docket as well as the terms and conditions applicable to each UNE. These tariffs shall reflect the rates included in BellSouth's cost studies filed on December 1, 1999, and the rates for combinations filed on June 9, 2000. Further, these tariffs shall reflect the rates for physical collocation using the AT&T and MCI collocation model as adopted by the Authority on

[52] TRA Rule 1220-4-1-.03 (Revised Dec. 1984).

January 25, 1999. Finally, these tariffs shall reflect the geographically deaveraged rates in three (3) zones as previously ordered by the Authority. BellSouth should follow the format in the attached **Exhibit A**[53] in presenting these rates.

7. Any party aggrieved by this Order may file a Petition for Reconsideration pursuant to Tenn. Code Ann. § 4-5-317 with the Tennessee Regulatory Authority within fifteen (15) days of the entry of this Order; and

8. Any party aggrieved by the decision of the Tennessee Regulatory Authority may file a Petition for Review with the Tennessee Court of Appeals, Middle Division, within sixty (60) day of the date of entry of this Order.

Sara Kyle, Chairman

H. Lynn Greer, Jr., Director

Melvin J. Malone, Director

ATTEST:

K. David Waddell, Executive Secretary

[53] The Authority distributed copies of **Exhibit A** to the parties during the December 19, 2000 Authority Conference.

Tennessee Interconnection and UNE Prices							
Cost Element	Network Elements	Unit	Recurring Rate	Nonrecurring		Disconnect	
				First	Additional	First	Additional
A.0	**Unbundled local loop**						
A.1	**2-Wire Analog Voice Grade Loop (2-WAVGL)**						
A.1.1	2-WAVGL- Service level 1						
	Zone 1						
	Zone 2						
	Zone 3						
A.1.2	2-WAVGL- Service level 2						
	Zone 1						
	Zone 2						
	Zone 3						
A.1.3	2-WAVGL-SL1-Manual Order Coordination						
A.1.4	2-WAVGL-SL1-Order Coordination for Specified Conversion Time						
A.1.5	2-WAVGL-SL2-Order Coordination for Specified Conversion Time						
A.2	**Sub-Loop 2-wire analog**						
A.2.1	Loop feeder per 2-WVGL						
A.2.2	Loop distribution - per 2-WAVGL						
A.2.3	Loop concentration- Channelization System (Outside C.O.)						
A.2.4	Loop concentration-Remote terminal Cabinet (Outside CO)						
A.2.5	Loop concentration-Remote Channel Interface -2-WAVGL (Outside CO)						
A.2.6	NID per 2-WAVGL						
A.2.7	LC-Channelization System-Incremental Cost-Manual Svc Order vs Electronic						
A.2.8	Sub-Loop Feeder-Order Coordination for Specified Conversion Time						
A.2.9	Sub-Loop Distribution-Order Coordination for Specified Conversion Time						
A.3	**Loop Channelization and CO Interface (Inside CO)**						
A.3.1	Loop Channelization System - DLC						
A.3.2	CO Channel Interface - 2-Wire Voice Grade						
A.3.3	LC-Channelization System-Incremental Cost-Manual Svc Order vs Electronic						

Tennessee Interconnection and UNE Prices							
Cost Element	Network Elements	Unit	Recurring Rate	Nonrecurring		Disconnect	
				First	Additional	First	Additional
A.4	**4-Wire Analog Voice Grade Loop**						
A.4.1	4-wire analog voice grade loop						
	Zone 1						
	Zone 2						
	Zone 3						
A.4.2	NID per 4-wire analog voice grade loop						
A.4.3	4-WAVGL-Order Coordination for Specified Conversion Time						
A.5	**2-Wire ISDN Digital Grade Loop**						
	Zone 1						
	Zone 2						
	Zone 3						
A.5.1	2-wire ISDN Digital Grade Loop						
A.5.2	NID per 2-Wire ISDN Digital Grade Loop						
A.5.3	2-Wire ISDN Digital Grade Loop-Order Coordination for Specified Conversion Time						
A.6	**2-wire asymmetrical digital subscriber line (ADSL) compatible loop**						
A.6.1	2-wire ADSL compatible loop						
	Zone 1						
	Zone 2						
	Zone 3						
A.6.2	NID per 2-wire ADSL loop						
A.6.3	2-Wire ADSL Digital Grade Loop-Order Coordination for Specified Conversion Time						
A.7	**2-wire high bit rate DSL compatible loop**						
	Zone 1						
	Zone 2						
	Zone 3						
A.7.1	2-wire HDSL compatible loop						
A.7.2	NID per 2-wire HDSL loop						
A.7.3	2-Wire HDSL Loop-Order Coordination for Specified Conversion Time						

Tennessee Interconnection and UNE Prices							
Cost Element	Network Elements	Unit	Recurring Rate	Nonrecurring		Disconnect	
				First	Additional	First	Additional
A.8	**4-wire HDSL compatible loop**						
A.8.1	4-wire HDSL compatible loop						
	Zone 1						
	Zone 2						
	Zone 3						
A.8.2	NID per 4-wire HDSL loop						
A.8.3	4-Wire HDSL Loop-Order Coordination for Specified Conversion Time						
A.9	**4-wire DS1 Digital Loop**						
A.9.1	4-wire DS1 Digital Loop						
	Zone 1						
	Zone 2						
	Zone 3						
A.9.2	4-Wire DS1 Loop - Incremental Cost - Manual Svc Order vs Electronic						
A.9.3	4-Wire DS1 Loop-Order Coordination for Specified Conversion Time						
A.10	**4-wire 56 or 64 KBPS Digital Grade Loop**						
A.10.1	4-wire 56 or 64 KBPS Digital Grade Loop						
	Zone 1						
	Zone 2						
	Zone 3						
A.10.2	NID per 4-wire 56 or 64 KBPS Digital Grade Loop						
A.10.3	4-Wire 56/64 Kbps Dig. GL-Order Coordination for Specified Conversion Time						
A.11	**Unbundled Loops-Incremental Cost-Manual Svc vs Electronic**						
A.11.1	Unbundled 2-Wire Loops-Incremental Cost-Manual Svc vs Electronic						
A.11.2	Unbundled 4-Wire Loops (excluding DS1)-Incremental Cost-Manual vs Electronic						
A.11.3	NID per 2-Wire Loops- Manual Svc Order vs Electronic						
A.11.4	NID per 4-Wire Loops- Manual Svc Order vs Electronic						

Tennessee Interconnection and UNE Prices

Cost Element	Network Elements	Unit	Recurring Rate	Nonrecurring		Disconnect	
				First	Additional	First	Additional
A.18	MULTIPLEXERS						
A.18.1	Channelization - Channel System DS1 to DS0						
A.18.2	Interface Unit - Interface DS1 to DS0 - OCU - DP Card						
A.18.3	Interface Unit - Interface DS1 to DS0 - Brite Card						
A.18.4	Interface Unit - Interface DS1 to DS0 - Voice Grade Card						
A.18.5	Channelization - Channel System DS3 to DS1						
A.18.6	Interface Unit - Interface DS3 to DS1						
A.18.10	Channelization - Channel System DS1 to DS0 - Incremental Cost - Manual Service Order vs. Electronic						
A.18.11	Channelization - Channel System DS3 to DS1 - Incremental Cost - Manual Service Order vs. Electronic						
B.0	UNBUNDLED LOCAL EXCHANGE AND FEATURES						
	Exchange Ports (EP)						
B.1	Exchange Ports (Including all Applicable Features)						
B.1.1	Exchange ports - 2-wire Analog Line Port (Res., Bus.)						
B.1.2	Exchange ports - 4-wire Analog Voice Grade Port						
B.1.3	Exchange ports - 2-wire DID Port						
B.1.4	Exchange ports - 4-wire DID Port						
B.1.5	Exchange ports - 2-wire ISDN Port						
B.1.6	Exchange ports - 4-wire ISDN DS1 Port						
B.1.7	Exchange ports - 2-wire Analog Line Port (PBX)						
B.1.8	Exchange ports - Coin Port						
B.1.9	EP-2-Wire Analog Line Port (Res.,Bus.)-Incremental Cost-Manual vs Electronic						
B.1.10	EP-4-WAVG Port-Incremental Cost-Manual Svc Order vs Electronic						
B.1.11	EP-2-Wire DID Port-Incremental Cost-Manual Svc Order vs Electronic						
B.1.12	EP-4-Wire DID Port-Incremental Cost-Manual Svc Order vs Electronic						
B.1.13	EP-2-Wire ISDN Port-Incremental Cost-Manual Svc Order vs Electronic						
B.1.14	EP-4-Wire ISDN DS1 Port-Incremental Cost-Manual Svc Order vs Electronic						
B.1.15	EP-2-Wire Analog Line Port (PBX)-Incremental Cost-Manual Sc Order vs Electronic						
B.1.16	Exchange ports - Coin Port-Incremental Cost-Manual Svc Order vs Electronic						

Tennessee Interconnection and UNE Prices							
Cost Element	Network Elements	Unit	Recurring Rate	Nonrecurring		Disconnect	
				First	Additional	First	Additional
C.0	UNBUNDLED SWITCHING AND LOCAL INTERCONNECTION						
C.1	**Local switching**						
C.1.1	End office switching function						
C.1.2	End Office Interoffice Trunk Port - Shared, per MOU						
C.2	**Tandem switching**						
C.2.1	Tandem switching function						
C.2.2	Tandem Interoffice Trunk Port - Shared, per MOU						
D.0	UNBUNDLED TRANSPORT AND LOCAL INTERCONNECTION						
D.1	**Common Transport**						
D.1.1	Common transport - per mile, per MOU						
D.1.2	Common Transport - Facilities Termination per MOU						
D.2	**Interoffice Transport - Dedicated - Voice Grade**						
D.2.1	Interoffice Transport - Dedicated - Voice Grade						
D.2.2	Interoffice Transport-Dedicated - 2-wire voice grade-per mile						
D.2.3	Interoffice Transport-Voice Grade-Incremental Cost-Manual Order vs Electronic						
D.3	**Interoffice Transport - Dedicated-DSO-56/64 KBPS**						
D.3.1	Interoffice Transport - Dedicated - DSO - per mile						
D.3.2	Interoffice Transport-Dedicated-DSO-Facility Termination						
D.3.3	Interoffice Transport-DS0-Incremental Cost-Manual Svc Order vs Electronic						
D.4	**Interoffice Transport - Dedicated - DS1**						
D.4.1	Interoffice Transport - Dedicated - DS1 - per mile						
D.4.2	Interoffice Transport-Dedicated-DS1-Facility Termination						
D.4.3	Interoffice Transport-DS1-Incremental Cost-Manual Svc Order vs Electronic						

Tennessee Interconnection and UNE Prices							
Cost Element	Network Elements	Unit	Recurring Rate	Nonrecurring		Disconnect	
				First	Additional	First	Additional
D.5	**Local Channel (LC) - Dedicated**						
D.5.1	Local Channel - Dedicated - 2-wire voice grade						
D.5.2	Local Channel - Dedicated - 4-wire voice grade						
D.5.3	Local Channel - Dedicated - DS1						
D.5.4	LC-Dedicated-2-Wire Voice Grade-Incremental Cost-Manual Sc Order vs Electronic						
D.5.5	LC-Dedicated-4-Wire Voice Grade-Incremental Cost-Manual Sc Order vs Electronic						
D.5.6	LC-Dedicated-DS1-Incremental Cost-Manual Svc Order vs Electronic						
E.0	**Signaling Network, Data Bases, & Svc. Mngt Sys.**						
E.1	**800 Access Ten Digit Screening**						
E.1.1	800 Access Ten digit screening (800 ATDS), per call						
E.1.2	800 Access Ten digit screening, Reservation Charge per 800 Number Reserved						
E.1.3	800 Access Ten digit screening, Per 800 # Established W/O POTS Translations						
E.1.4	800 Access Ten digit screening, Per 800 # Established With POTS Translations						
E.1.5	800 Access Ten digit screening, Customized Area of Service Per 800 Number						
E.1.6	800 ATDS, Multiple InterLATA CXR Routing Per CXR Requested Per 800 #						
E.1.7	800 Access Ten digit screening, Change Charge Per Request						
E.1.8	800 Access Ten digit screening, Call Handling and Destination Features						
E.1.9	800 ATDS, Resrv Chrg Per 800 # Reserved-Incrm Cost-Manual Svc Order vs Electr						
E.1.10	800 ATDS, Per 800 # Est'd w/o POTS Transl-Incrm Cost-Manual Svc Order vs Electr						
E.1.11	800 ATDS, Per 800 # Est'd w/ POTS Transl-Incrm Cost-Manual Svc Order vs Electr						
E.1.12	800 ATDS, Chng Chrg/Request-Incrm Cost-Manual Svc Order vs Electr						
E.2	**Line Information Data Base Access (LIDB)**						
E.2.1	LIDB Common Transport per Query						
E.2.2	LIDB Validation per Query						
E.2.3	LIDB Originating Point Code Establishment or Change						
E.2.4	LIDB-Incremental Cost-Manual Svc Order vs Electronic						

Tennessee Interconnection and UNE Prices							
Cost Element	Network Elements	Unit	Recurring Rate	Nonrecurring		Disconnect	
				First	Additional	First	Additional
E.3	CCS7 Signaling Transport						
E.3.1	CCS7 Signaling Connection, per 56kbps facility						
E.3.2	CCS7 Signaling Termination, per STP Port						
E.3.3	CCS7 Signaling Usage, per call setup message						
E.3.4	CCS7 Signaling Usage, per TCAP Message						
E.3.5	CCS7 Signaling Usage Surrogate, per 56kbps facility, per LATA per month						
E.3.6	CCS7-Incremental Cost-Manual Svc Order vs Electronic						
F.0	OPERATIONAL SUPPORT SYSTEMS						
F.1.	Operational Support Systems						
F.1.1	OSS Electronic Interface						
F.1.2	OSS OLEC Daily Usage File: Recording; per message						
F.1.3	OSS OLEC Daily Usage File: Message distribution, per message						
F.1.4	OSS OLEC Daily Usage File: Message Distribution, per magnetic tape provisioned						
F.1.5	OSS OLEC Daily Usage File: Data Transmission (Connect: Direct), per message						
G.0	OPERATOR SVC AND DIRECTORY ASSISTANCE						
G.1	Operator Call Processing (OCP)						
G.1.1	OCP - Op. Provided cost per min - using BST LIDB						
G.1.2	OCP - Op. Provided cost per min - using foreign LIDB						
G.1.3	OCP - Fully automated cost per call -using BST LIDB						
G.1.4	OCP-Fully automated cost per call-using foreign LIDB						
G.1.5	Loading Expense Per Announcement For Branded Announcement						
G.1.6	Recording Expense Per Announcement For Branded Announcement						
G.2	Inward Operator Services (IOS)						
G.2.1	IOS - Verification, per minute						
G.2.2	IOS - Verification and Emergency Interrupt, per minute						
G.3	Directory assistance (DA) call completion access service (DACC)						
G.3.1	DACC, per call attempt						

Tennessee Interconnection and UNE Prices

Cost Element	Network Elements	Unit	Recurring Rate	Nonrecurring		Disconnect	
				First	Additional	First	Additional
G.4	**Number Svcs Intercept Access Service**						
G.4.1	Number services intercept per query						
G.5	**Directory Assistance Access Service**						
G.5.1	DA Access Service Calls, cost per call						
G.5.2	Loading Expense Per Announcement For Branded Announcement						
G.5.3	Recording Expense Per Announcement For Branded Announcement						
G.6	**Directory Transport (DT)**						
G.6.1	DT - Local Channel DS1						
G.6.2	DT - DS1 Level Interoffice per mile						
G.6.3	DT - DS1 Level Interoffice per facility termination						
G.6.4	Switched common transport per DA access service per call						
G.6.5	Switched common transport per DA access service per call per mile						
G.6.6	Access Tandem Switching per DA Access service per call						
G.6.7	DT-DA Interconnection Per DA Service Call						
G.6.8	DT-Installation NRC, Per Trunk or Signaling Connection						
G.6.9	DT Local Channel DS1-Incremental Cost-Manual Svc Order vs Electronic						
G.6.10	DT Interoffice DS1-Incremental Cost-Manual Svc Order vs Electronic						
G.7	**Directory Assistance Data Base Service (DADS)**						
G.7.1	DADS Cost per Listing						
G.7.2	DADS, Monthly Recurring Cost						
G.8	**Direct Access to Directory Assistance**						
G.8.1	Direct access to DA Service, per month						
G.8.2	Direct access to DA Service, per query						
G.8.3	Direct Access to DA Service, Service Establishment Charge						
G.9	**Selective Routing (Interim Solution Line Class Codes)**						
G.9.1	Selective Routing Per Unique Line Class Code Per Request Per Switch						
G.9.2	Selective Routing-Incremental Cost-Manual Svc Order vs Electronic						

Tennessee Interconnection and UNE Prices

Cost Element	Network Elements	Unit	Recurring Rate	Nonrecurring		Disconnect	
				First	Additional	First	Additional
H.0	COLLOCATION						
H.2	**Virtual Collocation (VC)**						
H.2.1	VC- Application Cost						
H.2.2	VC- Cable Installation Cost Per Cable						
H.2.3	VC - Floor space per sq. ft.						
H.2.4	VC - Floor space power, per ampere						
H.2.5	VC - Cable support structure, per entrance cable						
H.2.6	VC - 2-wire cross connects						
H.2.7	VC - 4-wire cross connects						
H.2.8	VC - DS1 cross connects						
H.2.9	VC - DS3 cross connects						
H.2.10	VC - Security Escort - Basic, Per Half Hour						
H.2.11	VC -Security Escort - Overtime, Per Half Hour						
H.2.12	VC -Security Escort - Premium, Per Half Hour						
H.2.13	VC-2-Wire Cross Connects-Incrm. Cost - Manual Svc Order vs Electronic						
H.2.14	VC-4-Wire Cross Connects-Incrm. Cost - Manual Svc Order vs Electronic						
H.2.15	VC-DS1/DS3 Cross Connects-Incrm. Cost-Manual Svc Order vs Electronic						
I.0	SERVICE PROVIDER NUMBER PORTABILITY						
I.1	**Service Provider Number Portability - RCF**						
I.1.1	SPNP - RCF, Per number ported						
I.1.2	SPNP - RCF, Per additional path						
I.1.3	SPNP - RCF, Per Service Order, Per Location						
I.2	**Service Provider Number Portability - DID**						
I.2.1	SPNP - DID, Per Number Ported, Residence						
I.2.2	SPNP - DID, Per Number Ported, Business						
I.2.3	SPNP - DID, Per Service Order, Per Location						
I.2.4	SPNP - DID, per trunk termination, initial						
I.2.5	SPNP - DID, per trunk termination, subsequent						
I.2.6	SPNP - Manual Svc Order vs Electronic						
I.2.7	SPNP - Incremental Cost - Manual Svc Order vs Electronic						

Tennessee Interconnection and UNE Prices

Cost Element	Network Elements	Unit	Recurring Rate	Nonrecurring		Disconnect	
				First	Additional	First	Additional
I.3	**Service Provider Number Portability - Manual Svc Order vs. Electronic**						
I.3.1	SPNP - Incremental Cost - Manual Svc Order vs. Electronic						
I.4	**Service Provider Number Portability RIPH**						
I.4.1	SPNP - RIPH, Functionality, Per Central Office						
I.4.2	SPNP - RIPH, Functionality, Per Rearrangement						
I.5	**Service Provider Number Portability RI-PH (SPNP-RI-PH)**						
I.5.1	SPNP - RI-PH, per number ported						
I.5.2	SPNP - RI-PH, Per Service Order, Per Location						
J.0	**OTHER**						
J.1	**Dark Fiber**						
J.1.1	Dark fiber, per 4 fiber strands, per route mile or fraction thereof						
J.2	**Access to Poles, Ducts, Conduits and Roghts of Way**						
J.2.1	Access to Poles per Pole, Per Foot, Per Year						
J.2.2	Access to Conduits, Per Foot, Per Year						
J.2.3	Access to Innerduct, Per Foot, Per Year						
K.0	**ADVANCED INTELLIGENT NETWORK (AIN) SERVICES**						
K.1	**BellSouth AIN SMS Access Service**						
K.1.1	AIN SMS Access Service-Service Establishment, Per State, Initial Setup						
K.1.2	AIN SMS Access Service - Port Connection - Dial/Shared Access						
K.1.3	AIN SMS Access Service - Port Connection - ISDN Access						
K.1.4	AIN SMS Access Service - User Identification Codes - Per User ID Code						
K.1.5	AIN SMS Access Service - Security Card, Per User ID Code, Initial or Replacement						
K.1.6	AIN SMS Access Svc - Storage, per unit (100 kilobytes)						
K.1.7	AIN SMS Access Service - Session, per minute						
K.1.8	AIN SMS Access Svc-Company performed session, per minute						

Tennessee Interconnection and UNE Prices

Cost Element	Network Elements	Unit	Recurring Rate	Nonrecurring		Disconnect	
				First	Additional	First	Additional
K.2	**BellSouth AIN Toolkit Service (AIN TS)**						
K.2.1	AIN TS - Service Establishment Charge, Per State, Initial Setup						
K.2.2	AIN TS - Training Session, Per Customer						
K.2.3	AIN TS - Trigger Access Charge, Per Trigger, per DN,Term. Attempt						
K.2.4	AIN TS - Trigger Access Charge, Per Trigger, per DN, Off Hook Delay						
K.2.5	AIN TS - Trigger Access Charge, Per Trigger, per DN,Off-Hook Immediate						
K.2.6	AIN TS - Trigger Access Charge, Per Trigger, per DN, 10-Digit PODP						
K.2.7	AIN TS - Trigger Access Charge, Per Trigger, per DN, CDP						
K.2.8	AIN TS - Trigger Access Charge, Per Trigger, per DN,Feature Code						
K.2.9	AIN TS - Query Charge, Per Query						
K.2.10	AIN TS - Type 1 Node Charge, per AIN Toolkit subscription, per Node, per query						
K.2.11	AIN TS - SCP Storage charge, per SMS access account, per 100 kilobytes						
K.2.12	AIN TS - Monthly report - per AIN TS Subscription						
K.2.13	AIN TS - Special study - per AIN TS Subscription						
K.2.14	AIN TS - Call event report - per AIN TS Subscription						
K.2.15	AIN TS - Call event special study - per AIN TS Subscription						
P.0	**UNBUNDLED LOOP COMBINATIONS**						
P.1	**2-Wire Voice Grade Loop with 2-Wire Line Port**						
	Zone 1						
	Zone 2						
	Zone 3						
P.1.3	2-Wire Voice Grade Loop/Line Port Combo - Switch-as-is						
P.1.4	2-Wire Voice Grade Loop/Line Port Combo - Incremental Cost Manual Svc. Order vs Electronic						
P.1.5	2-Wire Voice Grade Loop/Line Port Combo - Subsequent Database Update						
P.1.6	2-Wire Voice Grade Loop/Line Port Combo -Subsequent Database Update - Incremental Manual Svc Order vs. Electronic						

Tennessee Interconnection and UNE Prices							
Cost Element	Network Elements	Unit	Recurring Rate	Nonrecurring		Disconnect	
				First	Additional	First	Additional
P.3	**2-Wire Voice Grade Loop with 2-Wire DID Trunk Port**						
	Zone 1						
	Zone 2						
	Zone 3						
P.3.3	2-Wire Voice Grade Loop with 2-Wire DID Trunk Port Combo - Switch-as-is						
P.3.4	2-Wire Voice Grade Loop with 2-Wire DID Trunk Port Combo - Incremental Cost Manual Svc Order vs. Electronic						
P.4	**2-Wire ISDN Digital Grade Loop with 2-Wire ISDN Digital Line Side Port**						
	Zone 1						
	Zone 2						
	Zone 3						
P.4.3	2-Wire ISDN Digital Grade Loop/2-Wire ISDN Line Side Port Combo - Switch-as-is						
P.4.5	2-Wire ISDN Digital Grade Loop/2-Wire ISDN Line Side Port Combo - Non Feature Subsequent Activity						
P.5	**4-Wire DS1 Digital Loop with 4-Wire ISDN DS1 Digital Trunk Port**						
	Zone 1						
	Zone 2						
	Zone 3						
P.5.3	4-Wire DS1 Digital Loop with 4-Wire ISDN DS1 Digital Trunk Port Combo- Switch-as-is						
P.5.5	4-Wire DS1 Digital Loop with 4-Wire ISDN DS1 Digital Trunk Port Combo-Subsequent Channel Activation - Per Channel						
P.5.6	4-Wire DS1 Digital Loop with 4-Wire ISDN DS1 Digital Trunk Port Combo-Subsequent Inward/2way Telephone Numbers						
P.5.7	4-Wire DS1 Digital Loop with 4-Wire ISDN DS1 Digital Trunk Port Combo-Subsequent Outward Telephone Numbers						
P.5.8	4-Wire DS1 Digital Loop with 4-Wire ISDN DS1 Digital Trunk Port Combo-Subsequent Inward Telephone Numbers						
P.5.9	4-Wire DS1 Digital Loop with 4-Wire ISDN DS1 Digital Trunk Port Combo-Subsequent Service Order Per Order						

Tennessee Interconnection and UNE Prices

Cost Element	Network Elements	Unit	Recurring Rate	Nonrecurring		Disconnect	
				First	Additional	First	Additional
P.6	**2-Wire Voice Grade Extended Loop With DS1 Dedicated Interoffice Transport**						
	First 2-Wire Voice Grade with DS1 (excluding mileage)						
	Zone 1						
	Zone 2						
	Zone 3						
P.17.1	Non-Recurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch-as-is						
	Interoffice Transport - Dedicated - DS1 - Per Mile (Same as D.4.1)						
	Additional 2-Wire Voice Grade Loop in Same DS1 (excluding mileage)						
	Zone 1						
	Zone 2						
	Zone 3						
P.7	**4-Wire Voice Grade Extended Loop With DS1 Dedicated Interoffice Transport**						
	First 4-Wire 56 or 65 kbps Digital Grade Loop withDS1 (excluding mileage)						
	Zone 1						
	Zone 2						
	Zone 3						
P.17.1	Non-Recurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch-as-is						
	Interoffice Transport - Dedicated - DS1 - Per Mile (Same as D.4.1)						
	Additional 4-Wire 56 or 65 kbps in Same DS1 (excluding mileage)						
	Zone 1						
	Zone 2						
	Zone 3						

Tennessee Interconnection and UNE Prices							
Cost Element	Network Elements	Unit	Recurring Rate	Nonrecurring		Disconnect	
				First	Additional	First	Additional
P.8	**4-Wire 56 or 64 kbps Extended Digital Loop With Dedicated DS1 Interoffice Transport**						
	First 4-Wire 56 or 64 kbps Digital Grade Loop with DS1 (excluding mileage)						
	Zone 1						
	Zone 2						
	Zone 3						
P.17.1	Non-Recurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch-as-is						
	Interoffice Transport - Dedicated - DS1 - Per Mile (Same as D.4.1)						
	Additional 4-Wire 56 or 64 kbps in Same DS1 (excluding mileage)						
	Zone 1						
	Zone 2						
	Zone 3						
P.9	**Extended 2-Wire Voice Grade Dedicated Local Channel with Dedicated DS1 Interoffice Transport**						
	First 2-Wire Local Channel with DS1 (excluding mileage)						
	Zone 1						
	Zone 2						
	Zone 3						
P.17.1	Non-Recurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch-as-is						
	Interoffice Transport - Dedicated - DS1 - Per Mile (Same as D.4.1)						
	Additional 2-Wire Voice Grade Channel in Same DS1 (excluding mileage)						
	Zone 1						
	Zone 2						
	Zone 3						

Tennessee Interconnection and UNE Prices							
Cost Element	Network Elements	Unit	Recurring Rate	Nonrecurring		Disconnect	
				First	Additional	First	Additional
P.10	**Extended 4-Wire Voice Grade Dedicated Local Channel with Dedicated DS1 Interoffice Transport**						
	First 4-Wire Local Channel with DS1 (excluding mileage)						
	Zone 1						
	Zone 2						
	Zone 3						
P.17.1	Non-Recurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch-as-is						
	Interoffice Transport - Dedicated - DS1 - Per Mile (Same as D.4.1)						
	Additional 4-Wire Voice Grade Channel in Same DS1 (excluding mileage)						
	Zone 1						
	Zone 2						
	Zone 3						
P.11	**Extended 4-Wire DS1 Digital Loop With Dedicated DS1 Interoffice Transport**						
	First 4-Wire DS1 Digital Loop with DS1 (excluding mileage)						
	Zone 1						
	Zone 2						
	Zone 3						
P.17.1	Non-Recurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch-as-is						
	Interoffice Transport - Dedicated - DS1 - Per Mile (Same as D.4.1)						
	Additional 4-Wire DS1 Loop in Same DS1 (excluding mileage)						
	Zone 1						
	Zone 2						
	Zone 3						

Tennessee Interconnection and UNE Prices							
Cost Element	Network Elements	Unit	Recurring Rate	Nonrecurring		Disconnect	
				First	Additional	First	Additional
P.15	**4-Wire DS1 Digital Loop With 4-Wire DID Trunk Port**						
	Zone 1						
	Zone 2						
	Zone 3						
P.15.3	4-Wire DS1 Digital Loop/4-Wire DID Trunk Port Combo - Switch-as-is						
P.15.5	4-Wire DS1 Digital Loop/4-Wire DID Trunk Port Combo - Subsequent Channel Activation - Per Channel						
P.15.6	4-Wire DS1 Digital Loop/4-Wire DID Trunk Port Combo - Subsequent Telephone Numbers						
P.15.7	4-Wire DS1 Digital Loop/4-Wire DID Trunk Port Combo - Subsequent Signaling Charges						
P.15.8	4-Wire DS1 Digital Loop/4-Wire DID Trunk Port Combo - Subsequent Service Order Per Order						